# **Syphilis**

**Definition:** A sexually transmitted disease caused by the bacterium *Treponema pallidum*. Symptoms are divided into four stages: primary and secondary (highly infectious); latent and late (no longer contagious). Primary stage--one or more painless indurated lesions (chancres); secondary stage--rashes, swollen lymph nodes and flu-like symptoms. ICD-9 codes 090-091.

# Summary

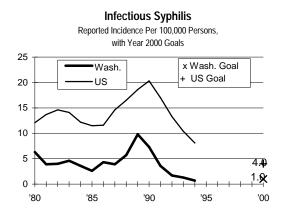
Syphilis is the oldest recognized sexually transmitted disease. Since 1990 cases of primary and secondary (infectious) syphilis in Washington have steadily declined. In 1994, 36 such infections occurred among Washington residents, for the lowest annual incidence rate (0.7/100,000) since 1954.

### **Time Trends**

Infectious syphilis trends in Washington State are similar to those seen nationwide. In the early 1980s a disproportionate number of cases occurred in homosexual men. In the mid-1980s syphilis declined in this population, primarily because of behavioral changes adopted in response to the HIV epidemic. In 1985 the incidence of infectious syphilis among heterosexual men and women began rising rapidly. Rates peaked in 1989 in Washington and in 1990 nationally. Increasing rates were linked to concurrent epidemics of illegal drug use, particularly of "crack" cocaine, and the exchange of sex for drugs or money to buy drugs. Since 1990 the number of syphilis cases has steadily declined. In 1994, 36 primary and secondary cases were reported in Washington for an incidence rate of 0.7/100,000 population.

# Year 2000 Goal

Washington's goal for the year 2000 is to reduce the reported annual incidence rate of primary and secondary syphilis to no more than



1/100,000. This was achieved in 1994 (incidence rate 0.7/100,000). Nationally, syphilis remains a problem only in selected states, primarily in the South. In other areas, including Washington, it is anticipated that low rates of syphilis will be sustained during the late 1990s.

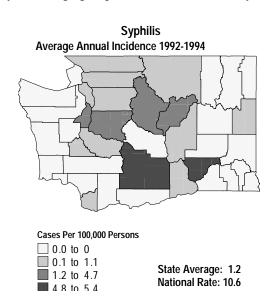
# Geographic Variation

The average annual incidence rate from 1992 through 1994 was 1/100,000 in Washington compared to 11/100,000 for the United States. The Washington counties with the highest average annual incidence rates were Yakima, Franklin, Douglas, King, Chelan and Kitsap. Twenty-two counties had no infectious cases during the 1992-1994 period.

# Age and Gender

Of the 36 primary and secondary syphilis cases reported in Washington in 1994, 25 (69%) were male and 11 (31%) were female. Six of the 11 females were pregnant at the time of diagnosis. The high proportion of cases among pregnant women results, at least in part, from syphilis screening that is required by law during prenatal care.

The highest incidence rates were in the 20-24 year old age group (4/100,000) followed by 25-29

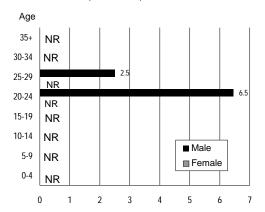


Syphilis 4.31

year olds (2/100,000).

# Infectious Syphilis by Age and Gender

Reported Incidence per 100,000, Wash., 1994

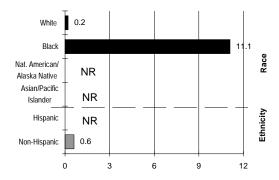


# Race and Ethnicity

In 1994, blacks had a much higher primary and secondary syphilis incidence rate than other racial groups.

#### Infectious Syphilis by Race and Ethnicity Reported Incidence per 100,000

Reported Incidence per 100,000 Wash., 1994



## Other Measures of Impact and Burden

For many STDs the impacts and burdens are similar (see Chlamydia section for a discussion of these common factors). However, there are some complications specific to syphilis.

Syphilis can be easily detected, treated and cured; if left untreated, however, it can have severe complications. Although death or serious disability rarely occur during early stages, late manifestations (for example, late lesions of skin, bone, viscera, the central nervous system and cardiovascular system) shorten life, impair health, and limit occupational efficiency. Proper treatment

will cure the infection, but damage already done to body organs in late syphilis cannot be reversed. Studies have shown that 15%-40% of untreated patients develop recognizable late complications. In 1994 there were 207 cases of late/latent syphilis reported in Washington.

Syphilis can be transmitted from a mother to her baby *in utero*. For pregnant women with untreated syphilis the risk of fetal death is 40%. Infants born to women with untreated syphilis may suffer brain damage, blindness, or bone deformities.<sup>2</sup> In 1994, there were three cases of congenital syphilis in Washington.

#### Risk and Protective Factors

Risk and protective factors are similar for a number of STDs (see Chlamydia section for discussion).

# **High Risk Groups**

The high risk groups for STDs are often the same (see Chlamydia section).

# Intervention Points, Strategies and Effectiveness

The intervention strategies are often alike for STDs (see Chlamydia section).

# Data Sources

State morbidity data: Washington Department of Health, Infectious Disease and Reproductive Health, Office of STD Services.

National morbidity data: Centers for Disease Control

#### For More Information

Washington Department of Health, Infectious Disease and Reproductive Health, Office of STD Services, (360) 753-5810.

### Endnotes:

4.32 Syphilis

<sup>&</sup>lt;sup>1</sup> Sparling PF. Natural history of syphilis. In: Holmes KK,Mardh PA,Sparling PF,Wiesner PJ,eds. Sexually Transmitted Diseases. 2nd ed. New York NY: MGraw-Hill. 1990. p 217.

<sup>&</sup>lt;sup>2</sup> Centers for Disease Control and Prevention. From Data to Action: CDC's Public Health Surveillance for Women, Infants and Children. U.S. Department of Health and Human Services. Atlanta: Centers for Disease Control and Prevention, 1994, p 39.